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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/585,354	07/06/2006	Osmo Pikkala	1034456-000039	2540
21839 7590 10/17/2007 BUCHANAN, INGERSOLL & ROONEY PC POST OFFICE BOX 1404 ALEXANDRIA, VA 22313-1404			EXAMINER FISHMAN, MARINA	
			ART UNIT 2832	PAPER NUMBER
			NOTIFICATION DATE 10/17/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/585,354

Applicant(s)

PIKKALA ET AL.

Examiner

Marina Fishman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☒ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 07/06/2006.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

DETAILED ACTION

General status

1. This is a First Action on the Merits. Claims 1 - 8 are pending in the case and are being examined.

Claim Objections

2. Claims 1 – 8 are objected to because of the following informalities:

Claim 1, line 3, “from inside the frame outside the frame” should be changed to – from inside the frame to outside the frame--.

Claims 2 - 8 “A switching device” should be corrected as –The switching device--.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1 – 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, lines 6-7 is not clear what is meant by “wherein in its portion ... gas flow”. The Examiner interprets the recitation as --in a portion of the connector ... gas flow--.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Rakus et al. [US 5,969,314].

Rakus et al. disclose a switching device comprising

- a switching device comprising a frame [5, 7];
- a first connector [13, 65], and
- a second connector [15, 95];
- the first connector and the second connector extending from inside the frame to outside the frame,;
- means [23] for connecting the first and the second connector electrically to one another; and
- one or more gas flow openings [not numbered, disclosed in Figure 2] provided in the frame and arranged for a gas flow produced by a switching event, wherein in a portion of the first connector remaining inside the frame, the first connector comprises a hole [97, Figure 4] provided for said gas flow.

Regarding Claim 2, the frame includes an upper part [5] and a lower part [7], the lower part being arranged to reside in the vicinity of frame structures of a mounting space, such as a switchgear cubicle, and that wherein each of said gas flow openings [only top holes close to upper part [5] are considered] provided in the frame resides

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farther from the lower part of the switching device than the first connector and the second connector.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lemmer et al. [US 4,401,863] in view of Rakus et al. [US 5,969,314].

Lemmer et al. disclose a switching device comprising:

- a switching device comprising a frame [1, 2];
- a first connector [3]; and
- a second connector [4];
- the first connector and the second connector extending from inside the frame to outside the frame;
- means [7, 18] for connecting the first and the second connector electrically to one another; and
- one or more gas flow openings [not numbered] provided in the frame and arranged for a gas flow produced by a switching event.

Lemmer et al. discloses all the claimed elements except for one or more gas openings and a portion of the first connector remaining inside the frame, the first connector comprises a hole. Lemmer et al. also discloses arc quenching plates [21],

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and gap between the means for connecting [7,18] and the plates [Figure 6] on either side of means for connecting the contacts, which would form openings for the gases. Rakus et al. disclose a first connector [65] remaining inside the frame comprises a hole [97]. It would have been obvious to one of ordinary skill in the art at the time the invention is made to provide a hole in the first connector of Bolongeat-Mobleu et al., as suggested by Rakus et al. in order to concentrate arc near the center of the arcing contact [Rakus et al., column 5, lines 52-54] and provide gas openings at in the top frame for exhausting the gases.

Regarding Claim 2, the frame includes an upper part and a lower part, the lower part being arranged to reside in the vicinity of frame structures of a mounting space, such as a switchgear cubicle, and that wherein each of said gas flow openings provided in the frame resides farther from the lower part of the switching device than the first connector and the second connector. Regarding Claims 3 and 6, Lemmer et al. discloses the first connector and the second connector are identical with one another. Regarding Claims 4, 5, 7 and 8, Lemmer et al. disclose the claimed invention except for specific dimensions of the gas flow openings. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide proper size of gas opening in a proper orientation, since it has been held that change in size or shape, only requires routine skill in the art. [In Re Rose 220 F2d 1048, 189 USPQ 143 (CCPA 1976) and In Re Dailey 357 F2d 669, 149 USPQ 47 (CCPA 1966)]. The motivation for providing the gas opening is to properly exhaust the gases away from the contacts.


Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marina Fishman whose telephone number is 571-272-1991. The examiner can normally be reached on 7-5 M-T.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on 571-272-1990. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Marina Fishman
October 11, 2007


ELVIN ENAD
SUPERVISORY PATENT EXAMINER
11 OCT 07